

REMARKS

Claims 6 and 8 are currently pending. Claims 6 and 8 have been amended. Claim 7, however, has been withdrawn from consideration.

Specification

The specification was objected to because "heater exchanger" should read "heat exchanger." The specification has been carefully checked and amended in all places to correct this and certain other informalities and is now believed to be in proper form.

Claim Rejections Under 35 U.S.C. § 112

Claim 8 was rejected under 35 U.S.C. § 112, second paragraph, because it recites the limitation "said air" in line 15 and there is insufficient basis for this limitation in the claim and different "air"-s have been recited. Claim 8 has been amended to correct these deficiencies.

Claims 6 and 8 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement in that they allegedly contain subject matter which was not described in the specification in such a way as

to enable one skilled in the art to make and/or use the invention. Claims 6 and 8 have been amended and the specification also has been amended on page 16, lines 5 to 11, in a way in which it is believed overcomes this rejection. The phrase "without using heat exchanger 4" has been moved from the end of the sentence in line 7 to line 5 of page 16 where it has been inserted after "cooling air." It is believed this clarifies the sentence and supports claims 6 and 8 without adding new matter.

Claim Rejections Under 35 U.S.C. §102

Claims 6 and 8 were rejected under 35 U.S.C. § 102(b) as being anticipated by Uematsu U.S. Patent 6,367,242 as understood published in Japan no later than May 26, 1999 (Japanese application 9-324565) for the reasons set forth on pages 3 and 4 of the Office Action.

For the reasons set forth hereafter, it is submitted that claims 6 and 8, as amended, are patentable.

Patentability of the Claims

Claim 6 has been amended to further define the bypass system as being installed on the cooling air system and beding

provided with a means for adjusting a flow rate of the part of a portion of said part of compressed air passing through the bypass system. Claim 8 has similarly been amended to further define a step of causing a portion of the air compressed by the compressor and flowing in the cooling air system to bypass the heat exchanger through the bypass system at a desired time during operation of the turbine to adjust the temperature of the part of the air compressed by the compressor flowing in the cooling air system on a downstream side of the heat exchanger in order to avoid overheating of the part of the air compressed by the compressor on the downstream side of the heat exchanger.

As discussed hereafter, these amendments to claims 6 and 8 further patentably distinguish these claims over the prior art.

With respect to the Uematsu '242 patent, this reference discloses a recovery type of steam cooled gas turbine. In Uematsu, at starting operation, compressed air from a compressor is used for cooling a gas turbine 1, and after the starting operation, but cooling steam, not compressed air, is used for cooling the gas turbine. Uematsu discloses a cooling air system including a bypass system, which is composed of an

air line with an on-off valve 15 and a flow rate regulator valve 7 and a line with a temperature adjuster 5 and an on-off valve 16. The starting operation of the gas turbine is described in lines 47 to 65 of column 7 of Uematsu. Thus, a flow rate of compressed air is adjusted by the flow rate regulator valve 7, and temperature of the compressed air to be fed to the turbine is adjusted by the temperature adjuster 5. The on-off valves 15, 16 are not used for regulating the flow rates of compressed air passing through the lines. The temperature adjustment of air to be fed to the gas turbine is effected by the temperature adjuster 5 but not effected by controlling a flow rate of only the air passing through the temperature adjuster 5.

In Uematsu, steam is used for cooling the gas turbine high temperature section, and air compressed by the compressor is used only for a warming-up operation of the gas turbine to prevent occurrence of dew formation.

Conversely, in the present invention as now described in the amended claims, a bypass system bypassing the heat exchanger is provided, and the bypass system has a means for adjusting a flow rate of air passing through the bypass system. Thus, the temperature of the compressed air to be fed

from the compressor to the gas turbine high temperature section is adjusted by controlling a flow rate of air passing through the bypass system which bypasses the heat exchanger for cooling the compressed air.

The temperature adjustment can be effected in a wide range with the simple construction or the simple method of the present invention. Therefore, the present invention is different from Uematsu in construction and operation and patentable thereover.

Conclusion

In view of the foregoing amendments and remarks, Applicants contend that this application is in condition for allowance. Accordingly, reconsideration and reexamination are respectfully requested.

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The Commissioner is hereby authorized to charge any fees
that may be due in connection with this response to Deposit
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Respectfully submitted,

A handwritten signature in cursive script, reading "Gene W. Stockman".

Gene W. Stockman
Registration No. 21,021
Attorney for Applicant

MATTINGLY, STANGER & MALUR
1800 Diagonal Road, Suite 370
Alexandria, Virginia 22314
(703) 684-1120
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